



National Center for Supply Chain Automation
RESOURCES FOR EDUCATION & INDUSTRY

ATE Careers for Veterans: Discharge Planning and the Civilian ATE Workforce

Ned D. Young, Ph.D.

Co-PI National Center for Supply Chain Automation

Ned.young@Sinclair.edu

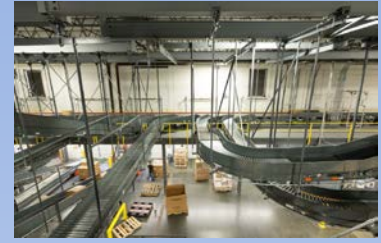
Our Environment

- The E-Commerce Revolution has increased on-line shopping
- Consumers want their purchases ASAP
- Retailers, shippers, and expeditors are turning to automation to meet customer expectations





Our Problem

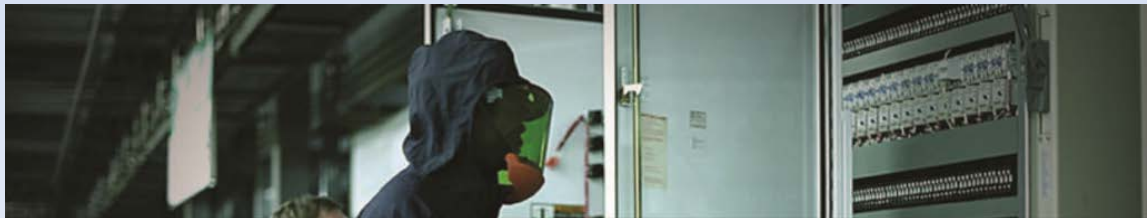


- Automated warehouses and distribution centers require higher-level skill sets (not unskilled pick/pack)
- Technicians install, operate, support, upgrade or maintain the automated material handling equipment
- Optical scanners, Automated Storage and Retrieval Systems ([ASRS](#)), programmable logic controllers (PLCs), conveyor systems, sensors and [robotics](#).



Our Second Problem

- Higher level automation skills require higher level employees
- Employers can't find enough skilled workers for job openings (projected openings between 2015-2025: 770,000)
- There are not enough high school and community college students graduating with necessary skills



Our Model Program

Course Title	Course Content	
Intro to Automated Warehousing	Overview of the Automated Warehouse	3 Units
Mechanics	General Mechanics	3 Units
DC Electrical	Direct Current Theory and Service	4 Units
AC Electrical	Alternating Current Theory and Service	4 Units
Microprocessors/Microcontrollers	Microprocessing and Control Systems	4 Units
Technical Communications	Business Documentation and Presentation	3 Units
Blueprint Reading	Study of Blueprints	2 Units
Math	Math for Supply Chain Automation	3 Units
OSHA	Safety Standards for General Industry	2 Units
Hydraulics/Pneumatics	Air and Fluid Power Basics	3 Units
Welding	Welding Basics	3 Units
Programmable Logic Controllers	PLC Theory and Maintenance	3 Units
TOTAL		37 Units



One Solution - Veterans

Military Service	Occupational Specialty														Notes
	Number	Title	Electrical	Electronics	Mechanics	Hydraulic/ Pneumatics	Blueprint/ Schematic Reading	Welding	Conveyor Systems	Material Handling	Scanners	Optical Sensors	Logic Controllers	Network Comm	
Army (MOS)	CMF* 91	Mechanical Maintenance													CMF: Career Management Field. CMF 91 has 16 sub-specialties (91A-91Z, not all letters used).
	91A	M1 Abrams Tank System Maintainer	●	●	●	●				●			●		Similar to USMC MOS 2146
	91B	Wheeled Vehicle Mechanic	●	●	●	●				●			●		
	91G	Fire Control Repairer	●	●	●					●			●	●	
	91L	Construction Equipment Repairer	●	●		●				●			●		
USN (Rating)	AE	Aviation Electrician's Mate	●	●	●		●								
	AS	AS-7606 Support Equipment Gas Turbine Mechanic	●	●	●	●	●						●		AS: Aviation Support Equipment Technician
	CE	Construction Electrician	●	●			●								
	UT	Utilitiesman			●	●	●	●							
USMC (MOS)	2146	Main Battle Tank Repairer/ Technician	●	●	●	●	●						●		Similar to Army MOS 91A
	3524	Fuel and Electrical Systems Technician	●	●	●	●	●								
	6073	Aircraft Maintenance Support Equipment Electrician/ Refrigeration Mechanic	●	●	●	●	●	●							
USAF (AFSC)	2AX2	Aerospace Ground Equipment Maintenance Technician	●	●	●	●	●						●		
	2M0X3	Missile and Space Facilities Technician	●		●	●	●								
	3E0X2	Electrical Power Production Technician	●	●	●		●								
	3E1X1	Heating, Ventilation, Air Conditioning, and Refrigeration Technician	●	●	●	●	●	●							

Electrical/Electronics
AC/DC, Logic Controllers, Optic
Scanners, Sensors, Blueprint
Reading

Material Handling Equipment
Conveyors, Guided Vehicles,
Automated Storage and
Retrieval Systems

SUPPLY CHAIN AUTOMATION

Professional Skills
Critical Thinking,
Problem Solving,
Teamwork

Other
Supply Chain
Automation Basics,
Safety Standards,
Welding Basics

**Industrial
Maintenance**
Mechanics,
Pneumatics,
Troubleshooting

Projected Job Openings and Wages

Electro-Mechanical Technicians

Yearly Projected Openings: 429
Typical Hourly Wage: \$16.40 - \$37.12
Typical Annual Salary: \$34,100 - \$77,200

Industrial Machinery Mechanics

Yearly Projected Openings: 17,150
Typical Hourly Wage: \$15.11 - \$34.85
Typical Annual Salary: \$31,400 - \$72,500

Electrical & Electronics Repairers, Commercial & Industrial Equipment

Yearly Projected Openings: 1,850
Typical Hourly Wage: \$16.48 - \$38.70
Typical Annual Salary: \$34,300 - \$80,500

The National Center for Supply
Chain Automation proudly
supports our Military
Veterans.



For More Information:
www.supplychainautomation.com

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National Center for Supply Chain Automation

Military Veterans -
Are you looking
for an exciting
new career?





Supply Chain Technician:

A person who installs, operates, supports, upgrades or maintains the automated material handling equipment and systems that support the supply chain.



Many Veterans already have supply chain technician skills:

1. Army MOS CMF 91 Series
Mechanical Maintenance
2. Army MOS 91A
M1 Abrams Tank System Maintainer
3. Marine MOS 3524
Fuel and Electrical Systems Technician
4. Marine MOS 2862
Electronics Maintenance Technician
5. Navy Rating AT
Aviation Electronics Technician
6. Navy Rating ET
Electronics Technician
7. Air Force AFSC 2A6X2
Aerospace Ground Equipment Maintenance Technician
8. Air Force AFSC 3EOX1
Electrical Systems Technician

Personnel with many other types of specialty training are also excellent candidates.



U.S. Employment 2015-2025

Job Openings - 770,000

Expected growth: 11%

Replacement Openings - 22%

Total Openings - 33%

**Supply Chain Technician
may be for you!**



START HERE

High School Diploma

STEM Related e.g.
Electronics, automation, robotics, HVAC, mechatronics, warehouse/distribution

Military Veterans

Army CMF 91, MOS 94D
Marine MOS 2146, 2862, 6073
Navy AS-7606, AT
Air Force AFSC 2A6X2, 2M0X2

Adult Workers

Retraining
Displaced
Career Change

ACADEMIC PATHWAYS

**Professional Organization
Certifications/Employer Training**
Manufacturing Skill Standards Council
Logistics Certification (MSSC-CLT); The
Society For Maintenance and Reliability
Professionals Certified Maintenance &
Reliability Technician (CMRT)

Community/Tech College Certificate
Supply Chain Automation; Industrial Maintenance: Mechatronics, Automated Systems

**Community/Tech College
Degree Programs (A.S.)**
Supply Chain Automation; Industrial Maintenance: Mechatronics, Automated Systems, Engineering Tech, Electronics Tech

**University
Degree Programs (B.S.)**
Mechatronics; Engineering Technology;
Electronics Technology

SCA RELATED CAREERS

Machinery Maintenance Worker
Lubricate machinery, change parts, or perform other routine machinery maintenance
\$14.14 - \$26.67 / hour

Industrial Machinery Mechanic
Repair, install, adjust, or maintain industrial production, distribution and processing machinery
\$20.64 - \$31.82 / hour

Electro-Mechanical Technician
Operate, test, maintain, or calibrate unmanned, automated, servo-mechanical, or electromechanical equipment
\$19.82 - \$32.13 / hour

Conveyor Systems Technician
Installation, maintenance, repair, and replacement of conveyor system and sub systems
\$20.64 - \$31.82 / hour

Electronics Engineering Technologist
Assist electronics engineers in such activities as electronics systems and instrumentation design or digital signal processing
\$23.93 - \$39.49 / hour

Robotics Technician
Install, program, maintain, or repair robots
\$19.82 - \$32.13 / hour

Next Steps

- Using National databases such as the American Council on Education's (ACE) Military Guide and
- State databases such as Ohio's Military Transfer Assurance (MTAG) guide
- Create specific articulated transfer credit recommendations that connect military occupations and course work with SCT Model Program courses to be shared with our education network.



An Example

ACE ID Course	Course Number	Name of the Military Training, Experience, and Coursework	Effective Date	Course Alignments with Current Statewide Course/Program Equivalency Guarantees	Sinclair Equivalency	Credit Hours
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AR-1704-0223 v5	602-15F10	UH-60/CH-47 HELICOPTER ELECTRICIAN	10/15– Present	OET001 DC Circuits OET003 AC Circuits	EET 1150 EEET 1155	(4) (3)
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AR-1715-0971 v3	198-94Y10	Integrated Family Test Equipment Operator/Maintainer	10/11– Present	OET001 DC Circuits OET002 Digital OET004 Microprocessors OET005 Electronics	EET 1150 EET 1131 EET 2261 EET 2201	(4) (5) (4) (5)
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The National Center for Supply Chain Automation

www.supplychainautomation.com

Ned D. Young, Ph.D.

Co-PI

Sinclair Community College

(937) 512-2759

Ned.young@Sinclair.edu

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